

## **ANL Nanoscience Workshop agenda, July 15 and July 19, 2004**

**15 minute talks, 10 minute discussion.**

**Thursday, July 15, 2004**

**Building 402, E1100 (behind APS auditorium)**

- 9:00 Eric Isaacs - Introduction
- 9:05 Sam Bader – Opportunities in nanomagnetism
- 9:30 George Crabtree - Quantum interactions in nanostructures.
- 9:55 Frank Fradin – Quantum Computation with electron spins: qubit networks of endohedral N in C<sub>60</sub>
- 10:20 break
- 10:35 Paul Fuoss – X-ray Scattering from optically trapped nanoparticles
- 11:00 John Freeland – X-ray enhanced STM
- 11:25 Xiao-Min Lin – Synthesis, Self-assembly and Physical Properties of Colloidal Nanoscale Building Blocks
- 11:50 Seth Darling - Hierarchical Self-Assembly as a Route to Functional Nanomaterials
- 12:15 lunch at the Guest House
- 1:30 Tijana Rajh – Bioinorganic hybrid systems
- 1:55 Lin Chen - Property Control of Organic Semiconductor Nanoparticles by Hierarchic Structural Manipulation
- 2:20 break
- 2:45 David Tiede – Biomimetics for Energy
- 3:10 Andrew Goshe – Supramolecular Nanoscience
- 3:35 Larry Curtiss - Nanocatalysis
- 4:00 Discussion

**Nanoscience Workshop agenda (cont.), Monday, July 19, 2004**  
**Building 401, A5000**

9:15 Peter Zapol – Virtual Fab Lab

9:40 Orlando Auciello – Science of complex oxides and interfaces at the nanoscale.

10:05 Brian Reiss - Biological Routes to Functional Ferroelectric Surfaces

10:30 break

10:45 Dieter Gruen - The Role of Electronic Configuration Hybridization and Electron-Phonon Interactions in Determining the Electronic Properties of Nanostructured Carbon Composites

11:10 John Carlisle - Synthesis, Properties, and Applications of NanoCarbons

11:35 Julius Jellinek – Computational Electron Spectroscopy – A powerful tool for studies of properties at the nanoscale

12:00 lunch

1:00 Greg Ballantine - Magnetic Nanoclusters

1:25 Vijay Tirumala - Developing Hydrogel-based Smart Nanomaterials

1:50 Derrick Mancini – Microfluidic Studies of Nanofluidics

2:15 break

2:30 Shufang Yu – Nano Sensing Devices

2:55 Gary Weiderrecht - Nanophotonics

3:20 Leo Ocola – New directions for the Center for Nanoscale Materials (CNM)

3:45 Discussion